

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Create a
Consistent Regulatory Framework for the
Guidance, Planning, and Evaluation of
Integrated Distributed Energy Resources.

Rulemaking 14-10-003
(Filed October 2, 2014)

**OPENING COMMENTS ON ADMINISTRATIVE LAW JUDGE'S
RULING REQUESTING COMMENT ON AN INTERIM GREENHOUSE
GAS ADDER OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 M),
SOUTHERN CALIFORNIA EDISON COMPANY (U 338 E), SOUTHERN
CALIFORNIA GAS COMPANY (U 904 G), SAN DIEGO GAS &
ELECTRIC COMPANY (U 902 M)**

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Dated: April 17, 2017

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I. INTRODUCTION

Pursuant to the *Administrative Law Judge's Ruling Requesting Comment On An Interim Greenhouse Gas Adder* dated April 2, 2017 (Ruling), Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company (collectively, Joint IOUs) file these opening comments on the Energy Division's Interim GHG Adder Proposal (Staff Proposal).

The Joint IOUs appreciate Staff's Proposal and agree with Staff that the 2016 Avoided Cost update did not take into account the new statewide GHG targets. The Joint IOUs also agree with Staff's analysis regarding the potential impact this omission could have on the energy efficiency (EE) portfolios' cost-effectiveness test results. While the Joint IOUs recognize that energy efficiency cost-effectiveness is a concern and support solutions to address the cost-effectiveness test for the EE portfolios for the period before the Integrated Resources Plan (IRP) is able to inform DER Planning, the Joint IOUs do not support the Staff Proposal. The Staff Proposal is incompatible with least-cost resource planning. In particular, Staff proposes to use a value of marginal GHG abatement from an unfinished process with an electric-sector-only focus, with undefined electric sector or load-serving entity (LSE)-specific greenhouse gas (GHG) targets, based

on an unvetted model with unvetted inputs. Staff then proposes to make key resource planning decisions using the resulting values. While it is unclear how the revised test would be used, the revised test may ultimately be used to approve programs that will impact utility rates. There is a better solution.

The Joint IOUs agree that an interim solution is needed to avoid a “disruptive effect on EE potential, goals, budgets, and programs”^{1/} until the IRP process can be leveraged to directly inform EE (and other distributed energy resource or DER) sourcing, including goals and budgets. The Joint IOUs propose an alternative that is better grounded in current approaches to DER planning and directly connected to the existing GHG reduction regime. The Joint IOUs propose the Avoided Cost Calculator (ACC) GHG prices be updated to reflect the impact of SB 32. We recommend the Commission use instead the California Air Resource’s Board’s (ARB) proposed Cap-and-Trade price ceiling post-2020 until the IRP is operational only for purposes of setting EE goals and budgets. This approach, detailed in section A below, is expected to provide a reasonable level of consistency in EE budgets, without creating unintended consequences by using a new, unvetted framework that is inconsistent with least cost practices. Below, the Joint IOUs also provide additional options that could be used to improve the cost-effectiveness analysis for EE during the transition to the IRP.

The Commission should reject the Staff’s proposed interim GHG Adder. The Commission should instead take the following steps:

- Update the GHG price forecast in the ACC, and, in the interim, assume a GHG price at the ARB Proposed Cap-and-Trade price ceiling post-2020.
- Consider additional options for EE, which could address the EE cost-effectiveness issues detailed on page 2 of the Staff Proposal without creating unintended consequences of using a new, unvetted framework that is inconsistent with least-cost procurement. These could include:
 - Revise the Total Resource Cost Test (TRC) inputs used for energy efficiency programs that unnecessarily depress program cost-effectiveness results;

1/ Staff Proposal, p. 2.

- Use gross savings for EE cost-effectiveness purposes, which is the current practice for other resources, until the IRP is operational or other resources have net savings estimates; and
- As a last alternative and on an interim basis, consider lowering the appropriate threshold for meeting cost-effectiveness for EE planning.^{2/}
- Utilize a transparent process in the IRP proceeding to:
 - ensure proper calculation of IRP marginal GHG abatement costs;
 - determine what uses are appropriate for any IRP electric sector marginal abatement cost calculated; and
 - determine how the IRP will create a unified cost-effectiveness framework and inform DER sourcing.
- Provide stakeholders with an opportunity to examine the soundness of the Staff Proposal by developing a transparent evidentiary record related to the assumptions and modeling that form the basis of the Staff Proposal, and allow a thorough examination of disputed facts through the development of testimony and evidentiary hearings.

The following comments highlight issues with the Staff Proposal and answer the three questions in the Ruling.

II. RESPONSES TO QUESTIONS ON THE STAFF PROPOSED INTERIM GREENHOUSE GAS ADDER

Q1: The Staff Proposal states that the most recent update of the avoided cost calculator did not reflect the cost impacts of the 2030 greenhouse gas targets, which will result in decreasing the amount of cost-effective energy efficiency potential. Explain why you agree or disagree with this assertion. If you agree, explain why this justifies adopting an interim greenhouse gas adder.

A1: The Joint IOUs agree that the 2016 avoided cost update did not include the cost impacts of the 2030 GHG targets. However, as outlined in sections A through E below, there is a better approach to address this issue than relying on preliminary,

^{2/} SoCal Gas does not support this option.

unvetted outputs from the IRP modeling. This approach, detailed in section A below, includes revising the GHG value in the ACC to reflect the ARB proposed Cap-and-Trade Allowance Price Containment Reserve (APCR) ceiling prices, values that are tied to the current mechanism for determining the marginal cost of carbon – the Cap-and-Trade market – with the GHG value capped at the ceiling price of that market.

The Joint IOUs also offer other options that could be pursued in the comments below. These options include addressing non-energy-related participant costs in the TRC, using gross savings for cost-effectiveness calculations or considering a different cost-effectiveness threshold, all of which would be temporary until the IRP is operational.

Q2: The Staff Proposal recommends the use of a straight line function to the marginal abatement cost, as indicated by Energy Division's preliminary Integrated Resource Plan model results, rather than the annual values produced by the same model. Explain why you do or do not support this recommendation.

A2: The Joint IOUs do not support this recommendation. The Joint IOUs do not support using a GHG adder that is not tied to the current marginal abatement mechanism, as discussed in greater detail in sections III A through E below. Furthermore, the straight line approach from \$0 in 2017 to \$250 in 2030 in the Staff Proposal lacks sufficient support in cost-benefit analysis literature. It does not represent the outputs of the RESOLVE model and grossly exaggerates the benefit of GHG reduction implied by the model.

Q3: The Staff Proposal contends that the interim greenhouse gas adder is needed as soon as possible to inform the energy efficiency potential and goals study. Explain why you do or do not support this timeline.

A3: The Joint IOUs support adopting the approach detailed in section A below in time for the EE potential and goals study rather than the approach in the Staff Proposal. The approach detailed in section A below can be implemented just as quickly as the Staff Proposal and in time for use in the EE potential and goals study.

III. DISCUSSION

A. Interim Approach for Energy Efficiency

The Joint IOUs agree with the Staff's discussion on page 2 of the Staff Proposal regarding the EE cost-effectiveness test and agree that the 2016 avoided cost update did not reflect SB 32 GHG reduction goals.^{3/} However, the Joint IOUs believe adopting the Staff's proposed interim GHG Adder may lead to suboptimal higher cost outcomes for customers. Therefore, alternate approaches should be used to support EE cost-effectiveness while IRP modeling, mechanics, and policy questions are resolved. This includes the following recommendation regarding a GHG value, as well as a number of additional complementary options that should be considered.

GHG Value: The Joint IOUs recommend that the GHG price forecast in the ACC be adjusted, on an interim basis, to ARB's Cap-and-Trade program proposed APCR, also known as the ceiling prices, post-2020, to reflect the potential effect of the State's 2030 goals.^{4/} For purposes of the EE Potential Study, the Joint IOUs suggested revision is as expedient as adopting the ED's proposed interim GHG adder. The Joint IOUs' proposal would provide a more stable GHG value, as the proposed APCR values start at \$76 in 2021 (\$86 nominal) and rise to \$86 in 2031 (\$115 nominal). This contrasts with the Staff

3/ A recent update of the Avoided Cost Calculator resulted in a significant reduction in current and forecast fuel costs, as well as other cost drivers. The update occurred prior to the adoption of SB 32 and, therefore, did not reflect the cost impacts of 2030 GHG targets now in state law. Because the Potential Study is highly dependent on Avoided Cost Calculator outputs, this is expected to significantly reduce the amount of cost-effective EE potential in the state, based on current cost-effectiveness tests. However, in enacting SB32 California has adopted a 2030 GHG goal which Staff expects will result in an implicit or explicit GHG adder that is significantly higher than the cost of GHGs currently reflected in the Avoided Cost Calculator. The IRP process will not develop a GHG adder value until after the EE goals update, and this timing mismatch is likely have a disruptive effect on EE potential, goals, budgets and programs – if GHG goals are ignored, EE budgets are likely to suffer large cuts, based on current cost-effectiveness restrictions. If GHG goals are later added, EE budgets would then increase significantly.” (Staff Proposal, p. 2.)

4/ ARB Staff Report, “Initial Statement of Reasons,” Appendix C, August 2, 2016, Table 5. Available at: <https://www.arb.ca.gov/regact/2016/capandtrade16/appc.pdf>.

Proposal, which starts with a GHG adder of zero in 2017 and rises to \$250 in 2030 (\$330 nominal) representing GHG cost above the Cap-and-Trade floor prices.^{5/}

The IRP process is in its nascent stages and still missing crucial design elements. Principally, the electric sector GHG target, which will have a significant impact on the IRP marginal abatement costs, has not yet been identified. In addition, while the IRP process may result in new electric sector or load serving entity (LSE)-specific GHG targets, there is insufficient clarity from the Commission, the CEC, and ARB, on how integrated resource planning will complement the ARB Cap-and-Trade program. It is therefore inappropriate to utilize preliminary outputs from a model that still has many unresolved questions. The ARB's Cap-and-Trade program represents the appropriate marginal GHG abatement cost and should be used to represent marginal abatement values in DER valuation, just as they would be used in supply-side valuation.

Additional Options: The Joint IOUs also propose the following additional options that could be considered for supporting EE until the IRP is operational.

TRC Measure Costs: The Joint IOUs recommend addressing participant costs currently included in the TRC that frequently cover energy and non-energy impacts (NEIs). In the Joint IOU opening comments on the ALJ Ruling Taking Comment on Staff Proposal Recommending a Societal Cost Test (SCT Ruling) dated March 23, 2017, the Joint IOUs describe the current deficiencies in addressing NEIs and recommend the Commission address these deficiencies by focusing on participant measure costs.^{6/} These participant costs comprise a significant portion of the costs included in the TRC equation and appropriate reductions to these costs would improve the test while also supporting EE program cost-effectiveness. One feasible and logical approach that could be implemented quickly is the following:

The Commission could assume that customers are rational and undertake projects that provide a net benefit to them, where these benefits take the form of energy savings, incentives, and NEIs. Since NEIs vary by measure and are very difficult and resource

5/ Nominal figures use a 2% inflation rate.

6/ See Joint IOU Opening Comments on SCT Ruling, pp. 25-26 (Mar. 23, 2017).

intensive to estimate, the Commission should instead focus on isolating the value of the energy benefits and incentives as a proxy for the energy-related costs. To do this, one can compare the present value of energy benefits, plus incentives, and project measure costs where the present value of the energy benefits and incentives is subtracted from existing measure costs. In cases where the remaining costs (the assumed costs of the NEIs) are positive, the present value of the energy benefits and incentive would be used in lieu of the measure costs. In cases where the remaining costs are negative (energy benefits outweigh measure costs), existing measure costs would be used. Aside from offering a sound theoretical basis for addressing participant NEIs, this approach can be implemented using existing tools, as the present value of the energy benefits of the project and incentive is the benefits portion of the participant cost test and can be calculated using the average rate, which is included in the EE cost-effectiveness calculator.^{7/} Effectively the TRC would become the present value of:

$$\sum_{t=1}^N \frac{\text{Avoided cost benefits (net of freeriders)}}{\text{Program Administrator Costs}^8 / + \text{Incentives (freeriders)} + [\text{Bill Savings} + \text{Incentives OR Measure Costs, if} < \text{Bill Savings}] \text{ (net of freeriders)}}$$

Gross Savings: The Commission could use gross savings in EE cost-effectiveness calculations on an interim basis until the IRP is operational or the net to gross issue is addressed in the Integrated Distributed Energy Resources (IDER) proceeding. While the net-to-gross calculation is currently required in EE cost effectiveness, it is not required for the cost-effectiveness analysis of other DERs. This inconsistency will be addressed in a later phase of this proceeding, but, in the interim, suspension could be considered for purposes of supporting EE until the IRP is operational. Suspension of the net-to-gross adjustment would effectively treat EE like other DERs.

7/ See rates tab of EE cost-effectiveness calculator. Also note that this might not be applicable to all EE program types, for instance, it might not be appropriate to apply this to direct install measures.

8/ Program Administrator Costs include the following EE cost categories: administration, marketing, direct implementation, and EM&V.

EE Cost-Effectiveness Threshold^{9/}: As a last alternative and on an interim basis, the Commission could also consider lowering the appropriate threshold for meeting cost-effectiveness for EE planning, which is currently 1.0. There is precedent for this, as the Commission approved the IOUs' 2012-2014 DR portfolios with a 0.9 TRC threshold.^{10/} This option could be considered to address the issues identified on page 2 of the Staff Proposal.

B. The Staff Proposal Could Result In Higher Costs To Customers And Should Not Be Approved.

The Staff Proposal is inconsistent with least-cost resource planning principles and is likely to adversely affect other planning proceedings. Specifically, by taking a single component – Marginal GHG abatement cost – out of the IRP process, then applying it out of context in the cost-effectiveness evaluation of a subset of resources, the Staff Proposal not only fails to evaluate demand-side and supply side resources consistently, but also yields more costly outcomes for customers. This is significant departure from current practices and makes the Staff Proposal an inappropriate interim solution.

- **Staff promotes diverging from long-established least-cost resource planning principles, yet provides no credible evidence for this.**^{11/} Staff incorrectly asserts that overpaying for DERs rather than procuring lower-cost resources mitigates the risk of not having enough resources to achieve the GHG reduction goals when less expensive alternatives are available. No quantitative or substantive evidence is provided to support Staff's claims of risk mitigation benefits. Clearly the issue is not whether there

9/ SoCalGas does not support the option of modifying the energy efficiency Cost-Effectiveness threshold of the TRC test below 1.0. SoCalGas believes that issues in achieving cost-effective programs should be addressed in program design rather than the Cost-Effectiveness threshold.

10/ See D.12-04-045, FOF 12.

11/ "Consequently, it may be desirable for the Commission to authorize the development of programs that support adoption of higher-cost DERs well in advance of when their deployment would be cost-effective (on a modeled basis) compared to other resources." (Staff Proposal, p. 5.) "Short-term procurement decisions that appear not to be least-cost, in terms of either system costs or GHG abatement costs at the time of procurement, can be considered a risk mitigation strategy." (Staff Proposal, p. 8.)

are enough alternatives to reduce emissions but how to achieve the desired emission reduction at the least cost.

- **The Proposal ignores other alternatives available in the economy to reduce emissions.** ARB's own analysis shows that economy-wide abatement cost is roughly 1/5 of the proposed electric sector's marginal abatement cost.^{12/} The Commission should not require customers to pay for procurement of GHG-reducing resources at multiple times the cost of abatement available from other sectors through the Cap-and-Trade mechanism.
- **Utilizing the proposed interim GHG adder may result in customer overpayments of more than a billion dollars per year.** In comparison to reductions obtained at the \$85/ton (\$115 nominal) allowance ceiling price for ARB's Cap-and-Trade Program, the staff proposed \$250/ton in 2030 (\$330 nominal) interim GHG adder would increase the cost of GHG reduction for CPUC-jurisdictional LSEs by about \$1.6 billion per year by 2030.^{13/} This is clearly contrary to the stated goal in SB 350 to find the least-cost solution to achieve the economy-wide 40% emission reduction goal (relative to 1990 levels).

C. The Process For Developing And Adopting A GHG Adder Value In A Potential SCT Test Must Be Subject To Stakeholder Input Through A Transparent Process.

Staff's proposal to use the RESOLVE model outputs to generate an interim GHG adder does not represent a transparent process. Staff proposes to utilize a value of marginal GHG abatement from an unfinished process, with undefined electric sector or LSE-specific GHG targets, and from an unvetted model with unvetted inputs, to make key resource planning decisions that will directly impact utility customer rates. The RESOLVE model, its inputs, and its outputs have not been made publically available, nor has the scenario or the GHG target used to produce the output used in the Staff Proposal.

12/ The Cap-and-Trade Program incremental cost of \$25 to \$85 per Mton is from ARB's January 20, 2017 Scoping Plan Update Proposed Strategy, Table III-3. Estimated 2030 Cost Per Metric Ton by Measure.

13/ Assume over-payment is the difference between \$250/ton and the Cap-and-Trade abatement cost ceiling of \$85/ton for an assumed 10 million metric ton reduction. The 10 million metric ton reduction required from the CPUC jurisdictional LSEs is assumed for purposes of this calculation.

No opportunity has been provided for stakeholders to comment on the model and its outputs. Without the transparency of stakeholder review, it is inappropriate and premature to utilize the RESOLVE model's \$250/ton in 2030 (\$330 nominal) value to set program budgets that will directly impact rates. The Commission must provide the stakeholders an opportunity to examine the factual soundness of the Staff Proposal by developing a transparent evidentiary record related to the assumptions and modeling that form the basis of the Staff Proposal, and if necessary, by allowing a thorough examination of facts through evidentiary hearings. In comparison, the GHG values that the Joint IOUs recommend have been scrutinized during the ARB's public processes, and can be adopted without additional examination.

Beyond the transparency issues identified, the Joint IOUs oppose on principle using the outputs from a long-term planning model, such as RESOLVE, to establish resource payments. The issues with model transparency are highly critical because Staff proposes to use the outputs of this unvetted long-term planning model in a way that may force the utilities' customers to incur higher costs when lower cost alternatives may exist. For these reasons, the Commission should pursue the alternate approaches for energy efficiency evaluation detailed in section A.

D. The Staff Proposal Contains Methodological Issues In Applying The Resolve Outputs To DER Cost-Effectiveness

Staff incorrectly asserts that including up to a \$250/ton (\$330 nominal) GHG adder adequately reflects the value of distributed energy resources (DERs) over the long term and can be utilized in the existing Avoided Cost Calculator cost-effectiveness framework. The Joint IOUs believe methodological mistakes may have been made in considering how to calculate and utilize the GHG shadow prices in RESOLVE; these issues should be addressed and reconciled in the IRP proceeding.

- **The marginal abatement cost obtained from the RESOLVE shadow price is not the value of the DERs.** The RESOLVE shadow price value represents the make-up payment needed to cover the cost of the last ton of GHG reduction in

RESOLVE's IRP optimization.^{14/} This make-up payment is necessary for just this last ton of emission reduction because the remaining value of the resource additions in RESOLVE's optimization – primarily energy and capacity value – is not enough to offset the cost of the resource. By definition, except for the last ton of emission reductions, all other ton reductions in an optimized plan can be obtained at a lower cost than the proposed marginal abatement cost. In simple terms, the Staff Proposal improperly budgets a large over-payment for all DERs when in fact those overpayments are only needed for the last ton of GHG emission reduction.

- **RESOLVE is not currently capable of including DERs in its system optimization and its shadow price therefore cannot represent the value provided by DERs.** Parties in the IRP proceeding^{15/} have stated that DERs must be included within the IRP framework. Considering DERs as part of the IRP process would allow a unified cost-effectiveness framework for producing least-cost GHG reducing plan that includes optimal levels of both DER and supply-side resources. The Joint IOUs reiterate support for that point. While the use of scenarios proposed by Staff for the 2017 IRP (for example, comparing costs between a 1x AAEE scenario and a 2x AAEE scenario) will allow IRP modeling to inform system costs at discrete DER levels, not including DERs within the optimization engine means that the shadow price of GHG abatement cannot represent the marginal abatement value provided by a DER resource.
- **It is inappropriate to mix and match marginal abatement cost from the IRP optimization with other avoided costs presently in the Avoided Cost Calculator that are derived from other sources and other scenarios.** Since the

14/ The shadow price in a capacity expansion optimization model represents a “make-up payment” that captures the costs of the marginal resource added to meet a given constraint minus the value provided by the marginal resource, if that constraint is binding.

15/ See Comments on “Ruling of Assigned Commissioner and ALJ Requesting Comments on Disadvantaged Communities and Other Aspects of Senate Bill 350, and Modifying Proceeding Schedule.” SCE p. 21: “The eventual goal of the IRP process would be to... consolidate demand side management (“DSM”) funding...”. SDG&E pp. 15-17: “...it make sense for the output of the IRP to serve, as appropriate, as an input into the IDER regarding resource needs... it should be relatively straightforward to continue to incorporate EE into the IRPs as a resource option...”

Staff Proposal provides no detail about the scenario or assumptions used to derive the marginal abatement costs in RESOLVE, it is impossible to tell how much double-payment is associated with this mix and match of avoided costs.

However, it is safe to conclude given the description in pages 3 and 4 of the Staff Proposal that more GHG-free supply and demand-side resources are included in the IRP's RESOLVE optimization than in the current ACC. Therefore, the resource balance year for capacity and hourly energy prices should be reduced well below the current avoided costs in the ACC model, to align with the RESOLVE output. Without remedy, this will cause double-counting and inconsistency issues between the two sets of avoided costs and the proposed marginal abatement cost adder. Clearly, the current assumption that the resource balance year is 2015 is inconsistent with the proposed GHG abatement cost.^{16/}

- **The proposal to use a linear ramp from \$0 in 2017 to \$250 (\$330 nominal) in 2030 is inconsistent with the RESOLVE outputs and grossly exaggerates the benefit of GHG reduction implied by the model.** The use of a linear ramp from now to 2030 generates high avoided GHG values when none are justified by the RESOLVE outputs, even as reflected in the Staff Proposal. Integrating under a linear ramp on Figure 1 in the Staff Proposal, implies that this suggestion will nearly double the avoided GHG value given to DERs between now and 2030, as compared to the RESOLVE outputs. As explained above, the Joint IOUs believe the RESOLVE shadow price already exaggerates the GHG reduction value of DERs. The IOUs do not agree with Staff's justification that this serves "as a (partial) counterweight to the delayed need for a GHG adder that results from excluding the cost of existing renewable contracts" because costs of existing

^{16/} As explained above, the shadow price of the GHG constraint represents the "make-up payment" of the cost of the marginal resource minus its value. A high shadow price indicates either a high cost or low values or both. For example, if only energy and capacity values are considered, then a \$50/MWh resource with a \$25/MWh energy value and a \$10/MWh capacity value has a net cost of $\$50 - \$25 - \$10 = \$15/\text{MWh}$ (or roughly \$35/ton of GHG abatement assuming each MWh displaces a GHG emitting resource at 0.428 metric ton / MWh, which will not be the case in low GHG systems). A higher capacity value, e.g. \$20/MWh, would result in a much lower GHG abatement cost of roughly \$11/ton.

contracts cannot be avoided by new DERs and hence should not be represented as avoided costs.

E. Using IRP Outputs To Inform Program Goals And Tariff Design Will Result In Sourcing Consistent With The Least-Cost IRP Plan, While The Use Of A GHG Adder Will Not

As stated in Opening Comments to the SCT Staff Proposal, and reiterated by TURN, ORA and IEP,^{17/} the Joint IOUs “envision the IRP optimization process to include both demand and supply-side resources, and expect the IRP process to result in outputs that can inform sourcing strategies to obtain the least-cost portfolio of resource to meet SB 350 objectives.”^{18/}

- **The IRP provides an indication of what resources may be part of a least-cost system plan but should not create hard mandates to procure specific amounts of resources regardless of their actual cost-effectiveness.** The IRP should inform DER goals by estimating what type of resources or programs, and how much of those resources or programs, are likely to be needed as part of the least cost plan to achieve the desired policy goals, in particular to help the state reduce GHG emissions economy-wide by 40% relative to 1990 levels. The IRP least-cost or preferred plan will be based on forecasted resource or program costs and operating attributes (hourly shape and likelihood of energy savings or generation because the actual availability cost and of resources will vary from the availability and cost assumed when preparing the LSE IRPs, LSEs should have

17/ TURN's Opening Comments on “ALJ Ruling on Staff Proposal Recommending a Societal Cost Test,” p. 4: “The goal must be to determine the optimal aggregate amount of resources to procure (and when), comparing all clean energy programs on an apples-to-apples basis... this necessitates stakeholder input to vet these assumptions, which may occur in part through the Integrated Resource Plan (IRP) process.” ORA, Reply Comments on “ALJ Ruling on Staff Proposal Recommending a Societal Cost Test”, p. 2: “ORA agrees that the IRP is the most appropriate venue for developing optimal resource portfolios and for consideration of an all-source cost-effectiveness framework that will consolidate the evaluation of demand- and supply-side resources.” IEP Opening Comments on “ALJ Ruling on Staff Proposal Recommending a Societal Cost Test”, p. 7: “The IRP context is more appropriate than the IDER/DRP context for adopting and applying a new cost-effectiveness tool for comparing and contrasting the value of diverse resources...”

18/ Joint IOU Opening Comments, p. 3 (Mar. 23, 2017).

the flexibility to acquire higher or lower amounts than those estimated in their IRPs.

- **DERs selected through an IRP framework that includes supply and demand-side resources can inform near-term goals and budgets for DER sourcing through competitive procurement, programs, or tariffs.** As a result of the fact that market realities often diverge from planning inputs, the LSE IRPs will contain action plans, goals, and budgets for the next few years of resource or program acquisition, until the next IRP cycle, but those goals and budgets should not constitute hard mandates to procure or acquire resources through DER programs or tariffs of the exact amounts estimated in the LSE IRPs. Resource availability and costs will evolve with changes in the market, technology, and customer preferences, and LSEs may not be able to procure resources at costs assumed when preparing the plan. However, the lessons learned from an IRP cycle, and the implementation of past cycles, should inform the development of actions plans and budgets in future IRP cycles.
- **Utilizing optimal levels from the IRP system plan to inform near-term DER program and tariff design will ensure alignment with least-cost IRP plan, rather than overpayment resulting from Staff's proposed approach.** While the means for the IRP to inform DER sourcing in the IDER should be determined in the IRP proceeding, the Joint IOUs offer an initial suggestion to initiate stakeholder discussions. The cost or volumes of various DERs selected by the IRP should be used to inform the Commission's development of near-term program goals/budgets and the design of tariffs. The Staff Proposal's approach of utilizing the marginal GHG abatement values for the last unit added to satisfy the GHG constraint will not result in the least-cost portfolio of resources, but rather overpayment for DERs to provide the same level of GHG reduction that could have been achieved at lower cost. Utilizing the IRP results to inform DER goals/budgets should reflect the levels of DERs selected in the least-cost portfolio, ensuring reasonable costs to customers to achieve the state's ambitious clean energy goals. This would require DERs to be a part of the IRP optimization to

ensure a unified cost-effectiveness framework (i.e., a “level-playing field”) between demand and supply-side resources.

IV. CONCLUSION

The Joint IOUs appreciate this opportunity to submit opening comments on the Staff Proposal for Interim Greenhouse Gas Adder and requests that the Commission begin a process to resolve disputed factual issues raised by the Staff Proposal as indicated in these comments.

Respectfully Submitted on behalf of Southern California Edison Company, Southern California Gas Company, San Diego Gas & Electric Company and Pacific Gas and Electric Company,

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